

Bloodborne Pathogens Awareness Training

IVT Course # 62837

Video Self-Study Course # 25837

*Conducted via Interactive Video Teletraining
on the Aviation Training Network (ATN)*



Developed and Presented by

Frank DelGaudio

**Office of Accident Investigation, AAI-200
Federal Aviation Administration
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I. Interactive Video Teletraining (IVT) and Course Orientation

About This IVT Course

This training describes the hazards of bloodborne pathogens while performing aircraft accident investigation. The various bloodborne pathogens are described and there is a discussion of the vaccination for Hepatitis B. The course outlines the process for conducting an accident investigation to minimize the exposure to bloodborne pathogens, and covers the use and danger of wearing bio hazard gear.

What Is ATN?

ATN stands for the Aviation Training Network, a one-way video, 2-way audio, satellite broadcast facility located at the FAA Academy in Oklahoma City

Participants are located at any of more than 60 receive sites around the country and can see the instructor and course visuals on television sets in their classrooms. The participants can communicate with the instructor through Viewer Response System keypads. During the live presentation, when a participant has a question or the instructor asks for specific participant responses to questions, the participant(s) can signal to the instructor using their keypad responders. The collective participant responses or the name of a specific participant signalling a question are immediately visible to the instructor on the console at the broadcast site. The instructor can then respond as needed. When the instructor calls on a specific participant to speak from a site, participants at each of the other sites can simultaneously hear the participant who is speaking.

Who Is the Target Audience?

This course is designed for employees identified as being subject to call-out to support an accident response “go team.” It fulfills the training requirement specified in FAA Order 8020.11B.

Who is the Instructor?

Frank DelGaudio is with the Office of Accident Investigation, AAI-200, and is currently the manager of the Recommendation and Analysis Division. He is an associate instructor for the Transportation Safety Institute, lecturing in Accident Investigation courses. He has investigated approximately 45 major accidents/incidents and 25 field investigations as the FAA Investigator in Charge. He has ratings as a commercial pilot, flight instructor, aircraft mechanic, inspection authorization, ground instructor, flight engineer, and parachute rigger.

What Will You Learn?

Course Objectives:

- Participants will be able to identify bloodborne pathogens and the hazards of aircraft accident investigation as related to bloodborne pathogens.
- Participants will understand the benefits of Hepatitis B vaccine series.
- Participants will be able to identify the proper equipment to be used in accident investigation to minimize the exposure of bloodborne pathogens.

How Will You Get Credit?

IVT: AIR Training Managers will enter completions for Aircraft Certification employees who attend the live IVT broadcast and are either logged in through the keypad system and/or sign a class roster that is faxed to the IVT studio.

Video Self-Study: AIR employees who watch the self-study video **MUST** complete the end of course evaluation and return to their AIR Training Manager in order to get a completion entered into their training history.

Non-AIR employees need to talk to their training personnel to determine how to get a completion.

II. Bloodborne Pathogens Awareness Presentation Visuals



Bloodborne Pathogen Exposure Control In Accident Investigation

Frank Del Gandio
Manager, Recommendation and Safety
Analysis Division, AAI-200

Occupational Exposure to Bloodborne Pathogens and YOU!



OSHA
29 CFR 1910.1030

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Purpose of OSHA Regulation



- ◆ Understand the risks associated with accident investigation.
- ◆ Use proper procedure in conducting AI to control exposure to bloodborne pathogens.
- ◆ You are responsible for yourself—IIC.

3

Hazards



- ◆ AIDS
- ◆ HIV
- ◆ Hepatitis B
- ◆ HBV

4

Health Risks on Site



- ◆ HIV and AIDS Create Fear
- ◆ Hepatitis B is the Greater Risk







5







Protection















- ◆ Education
- ◆ PPE
- ◆ Shots
- ◆ Common Sense







6







<p>Training Program Elements </p> <ul style="list-style-type: none"> ◆ Accessible copy of OSHA standard. ◆ Modes of bloodborne pathogen transmission. ◆ Exposure Control Plan <p>7</p>	<p>Training Program Elements </p> <p>(Continued)</p> <ul style="list-style-type: none"> ◆ Personal protective equipment. ◆ HBV vaccination. ◆ Exposure incident procedures. ◆ Signs and labels. ◆ Question and answer period. <p>8</p>
<p>Definitions </p> <ul style="list-style-type: none"> ◆ BLOOD – Human blood, human blood components and products made from human blood. This also includes tissue and bone. <p>9</p>	<p>Definitions </p> <p>(Continued)</p> <ul style="list-style-type: none"> ◆ BLOODBORNE PATHOGEN – Microorganisms present in human blood that can cause disease in humans. These pathogens include but are not limited to Hepatitis B virus (HBV) and human immunodeficiency virus (HIV). <p>10</p>
<p>Definitions </p> <p>(Continued)</p> <ul style="list-style-type: none"> ◆ CONTAMINATED – The presence or the reasonably anticipated presence of other potentially infectious material on an item, surface or ground. <p>11</p>	<p>Definitions </p> <p>(Continued)</p> <ul style="list-style-type: none"> ◆ OCCUPATIONAL EXPOSURE – Reasonably anticipated contact with blood or other potentially infectious materials during the performance of duties. <p>12</p>

<p style="text-align: center;">Definitions (Continued)</p>  <ul style="list-style-type: none"> ◆ EXPOSURE INCIDENT – A specific eye, mouth, mucous membrane, non-intact skin or parenteral (below skin) contact with blood or other potentially infectious materials during the performance of duties. <p style="text-align: right;">13</p>	<p style="text-align: center;">Hepatitis B Immunization-Vaccination</p>  <ul style="list-style-type: none"> ◆ Employer required to make available. ◆ No cost for vaccination to employee. ◆ Administered by licensed physician or health care professional. ◆ Provided in accord with recommendations of U.S. Public Health Service. <p style="text-align: right;">14</p>
<p style="text-align: center;">Symptoms</p>  <ul style="list-style-type: none"> ◆ Jaundice ◆ Fatigue ◆ Abdominal Pain ◆ Loss of Appetite ◆ Nausea ◆ Diarrhea ◆ Dark Urine ◆ Hard Clay-Colored Stool ◆ Flu-like Symptoms <p style="text-align: right;">15</p>	<p style="text-align: center;">Exposure Control Plan</p>  <ul style="list-style-type: none"> ◆ Exposure Determination ◆ Methods of Compliance ◆ Procedure for Evaluation of an Exposure Incident <p style="text-align: right;">16</p>
<p style="text-align: center;">Regulated Waste</p>  <ul style="list-style-type: none"> ◆ Liquid or semi-liquid blood. ◆ Items that would release blood in liquid or semi-liquid state if compressed. ◆ Items caked with blood. <p style="text-align: right;">17</p>	<p style="text-align: center;">Regulated Waste (Continued)</p>  <ul style="list-style-type: none"> ◆ Contaminated sharps. ◆ Pathological and microbiological waste containing blood. <p style="text-align: right;">18</p>

<p>Universal Precautions </p> <p>All human blood and body fluids are treated as if containing HBV, HIV, and other bloodborne pathogens.</p> <p>19</p>	<p>Controls </p> <ul style="list-style-type: none"> ◆ ENGINEERING CONTROLS – Controls that isolate or remove the pathogen hazard from the workplace. ◆ WORK PRACTICE CONTROLS – Reduce the likelihood of exposure by altering the manner in which a task is performed. <p>20</p>
<p>Engineering Controls </p> <ul style="list-style-type: none"> ◆ Products Designed to Create a Safer Work Environment for Investigators ◆ Antiseptic Towelettes ◆ Bottle of Disinfectant <p>21</p>	<p>Engineering Controls (Continued) </p> <ul style="list-style-type: none"> ◆ Washing Facilities ◆ Biohazard Bags ◆ Toxicology Kit ◆ Signs and Labels <p>22</p>
<p>Work Practice Controls </p> <ul style="list-style-type: none"> ◆ Advanced Planning ◆ Common Sense ◆ Avoiding Contamination ◆ Move Contaminated Wreckage as Little as Possible ◆ Hand Washing Required. <p>23</p>	<p>Work Practice Controls Prohibitions </p> <ul style="list-style-type: none"> ◆ Don't store food or drink near biohazard. ◆ Transport non-disposable PPE in approved containers. ◆ Disposed of regulated waste in biohazard bags. <p>24</p>

<p>If Exposure Incident </p> <ul style="list-style-type: none"> ◆ Rinse/Clean Contaminated Area ◆ Wash with Soap and Water ◆ Notify Supervisor <p>25</p>	<p>Housekeeping </p> <ul style="list-style-type: none"> ◆ To be done by each Investigator ◆ Tools, Tape Recorder, Clipboard ◆ Camera Equipment ◆ Contaminate Aircraft Parts. <p>26</p>
<p>Housekeeping (Continued) </p> <ul style="list-style-type: none"> ◆ Contaminated Laundry Stored in Labeled Containers ◆ DO NOT Take Personal Contaminated Laundry Home ◆ Wash at Appropriate Facility <p>27</p>	<p>Initial Accident Site Survey </p> <ul style="list-style-type: none"> ◆ Approach with Caution ◆ Consider Environmental Conditions (wind, rain) Effect on the Spread of Contamination. <p>28</p>
<p>Initial Accident Site Survey (Continued) </p> <ul style="list-style-type: none"> ◆ Use as a Minimum: Latex Gloves, Utility gloves, Goggles, and Boots ◆ IIC/Safety Officer Will Determine Proper PPE for Accident Investigators. <p>29</p>	<p>HOUSEKEEPING Includes Defined Methods For </p> <ul style="list-style-type: none"> ◆ Cleaning and decontaminating equipment and materials. ◆ Procedures for containing and disposal of regulated waste. <p>30</p>

<p>Off Site Investigations </p> <ul style="list-style-type: none"> ◆ Not Decontaminated – Treat as On Site ◆ Signs/Placards ◆ Keep Spectators Away ◆ Keep News Media Away ◆ Law Enforcement Guards <p>31</p>	<p>Personal Protective Equipment (PPE) </p> <p><i>Specialized clothing or equipment that is worn for protection against a hazard.</i></p> <ul style="list-style-type: none"> ◆ Gloves ◆ Liquid resistant overalls ◆ Face shield/goggles ◆ Boots ◆ Protective mask <p>32</p>
<p>General Requirements For PPE </p> <ul style="list-style-type: none"> ◆ Employer must provide the PPE and ensure its use. ◆ PPE is provided at no cost to the employee <p>33</p>	<p>General Requirements For PPE (continued) </p> <ul style="list-style-type: none"> ◆ The equipment is accessible and in appropriate sizes. ◆ PPE is cleaned, replaced, or disposed of by employer. <p>34</p>
<p>Heat Stress Prevention Hydration </p> <ul style="list-style-type: none"> ◆ Before beginning your work, drink ½ to 1 quart of water. ◆ While working, drink ½ to 2 quarts of water at regular intervals. Drink more frequently the higher the temperature, humidity, and the more strenuous the work. <p>35</p>	<p>Heat Stress Prevention Hydration (Continued) </p> <ul style="list-style-type: none"> ◆ Avoid sugary soft drinks. ◆ Limit <u>coffee</u> and other drinks containing <u>caffeine</u>. ◆ DO NOT take salt tablets, unless directed by medical personnel. ◆ As a general rule, <u>Drink Before You Get Thirsty</u> <p>36</p>

<p style="text-align: center;">Rule of Thumb </p> <ul style="list-style-type: none"> ◆ Scene is contaminated ◆ Your are Clean ◆ Keep Clean Things Clean ◆ Avoid Contaminated Things <p style="text-align: right;">37</p>	<p style="text-align: center;">Rule of Thumb (Continued) </p> <ul style="list-style-type: none"> ◆ PPE is Meant to Keep Investigator Clean ◆ Anything Contaminated Stays Inside Biohazard Bag ◆ Don't Bring Contaminated Home <p style="text-align: right;">38</p>
<p style="text-align: center;">Shipment of Parts </p> <ul style="list-style-type: none"> ◆ Use Common Sense ◆ Wash Parts with 10% Household Chlorine Bleach Solution ◆ Air Dry Parts for at least 30 minutes <p style="text-align: right;">39</p>	<p style="text-align: center;">Shipment of Parts (Continued) </p> <ul style="list-style-type: none"> ◆ Not Fatigue Fractures ◆ Box or Wrap ◆ Document how part has been disinfected <p style="text-align: right;">40</p>
<p style="text-align: center;">If Exposure Incident </p> <ul style="list-style-type: none"> ◆ Rinse/Clean Contaminated Area ◆ Wash with Soap and Water ◆ Notify Supervisor <p style="text-align: right;">41</p>	<p style="text-align: center;">Bloodborne Pathogens </p> <ul style="list-style-type: none"> ◆ Stay Safe! ◆ Stay Clean! ◆ Stay Alive! <p style="text-align: right;">42</p>

III. Course Evaluation Forms

If you are taking this course via IVT/ATN and you are logged on to a keypad, you will be asked to complete the course evaluation by using the Viewer Response System keypad. Your instructor will provide directions on how and when to complete the course evaluation. There are also some open-ended questions that you can respond to (in writing), and these can be faxed back to the ATN studio.

If you are completing the course via self-study video, please complete the form and return to your AIR Training Manager (ATM). Include the date when you completed the self-study. Please note that to get credit in your training history for watching the video, you **MUST** return the evaluation form.

IVT or Self-Study Video Evaluation Form

Bloodborne Pathogens Awareness

IVT Course # 62837 Self-Study Course # 25837

January 7, 2003

We want your candid opinion on the course you just completed. Your feedback will help us to provide the best possible products and services. Please respond to the questions below. Some of the questions may be more applicable than others for the course you have completed.

A = Highly Satisfactory B = Satisfactory C = Somewhat Satisfactory
D = Not at all Satisfactory E = Not applicable

1. Clarity of objectives	A	B	C	D	E
2. Clarity of instructions	A	B	C	D	E
3. Ease of navigation	A	B	C	D	E
4. Relevance of content to your job	A	B	C	D	E
5. Relevance of exercises to your job	A	B	C	D	E
6. Effectiveness of presentation of content	A	B	C	D	E
7. Quality of feedback	A	B	C	D	E
8. Quality of instructor/student communication	A	B	C	D	E
9. Supervisor support in course completion	A	B	C	D	E
10. Overall quality of the course	A	B	C	D	E

Bloodborne Pathogens Awareness

IVT Course # 62837 January 7, 2003

Self-Study Course # 25837 Date:_____

(Please complete manually)

What information was most useful to you and why?

What information was least useful to you and why?

Additional comments:

If completing this page after participating in the live ATN broadcast, please fax this sheet to the ATN studio at 405 954-0317.

If completing after watching the video, send to your AIR Training Manager (ATM).